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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/814,428	GOURLAOUEN ET AL.
Office Action Summary	Examiner	Art Unit
	BARBARA FRAZIER	1611
The MAILING DATE of this communication a Period for Reply	ppears on the cover sheet with the	correspondence address
A SHORTENED STATUTORY PERIOD FOR REF WHICHEVER IS LONGER, FROM THE MAILING  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period.  - Failure to reply within the set or extended period for reply will, by stat Any reply received by the Office later than three months after the ma earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION 1.136(a). In no event, however, may a reply be to will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDON	N. imely filed in the mailing date of this communication. ED (35 U.S.C. § 133).
Status		
1) ☐ Responsive to communication(s) filed on <u>08</u> 2a) ☐ This action is <b>FINAL</b> . 2b) ☐ This action is application is in condition for allow closed in accordance with the practice unde	nis action is non-final. vance except for formal matters, pr	
Disposition of Claims		
4) ☐ Claim(s) 1-69 is/are pending in the application 4a) Of the above claim(s) 14-21,24-29 and 3 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-6,9-13,22,23,30,66-69 is/are rejee 7) ☐ Claim(s) 7 and 8 is/are objected to. 8) ☐ Claim(s) are subject to restriction and are subject to restriction and application Papers 9) ☐ The specification is objected to by the Examination The specification The spe	<u>1-65</u> is/are withdrawn from considenced.  I/or election requirement.  ner.	
10) ☐ The drawing(s) filed on is/are: a) ☐ a  Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct of the control of the control of the correct of the control of the correct	ne drawing(s) be held in abeyance. Seection is required if the drawing(s) is of	ee 37 CFR 1.85(a). bjected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of:      1. ☐ Certified copies of the priority docume 2. ☐ Certified copies of the priority docume 3. ☐ Copies of the certified copies of the priority docume application from the International Bure * See the attached detailed Office action for a limit	ents have been received. ents have been received in Applica riority documents have been receive eau (PCT Rule 17.2(a)).	tion No ved in this National Stage
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	4) Interview Summar Paper No(s)/Mail [ 5) Notice of Informal 6) Other:	Date

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## **DETAILED ACTION**

#### Status of Claims

- 1. Claims 1-69 are pending in this application.
- 2. Claims 47-65 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 11/15/07.
- 3. Claims 14-21, 24-29, and 31-46 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 11/15/07.
- 4. Claims 1-13, 22, 23, 30, and 66-69 are examined.

## Allowable Subject Matter

- 5. The elected species, wherein the at least one fluorescent dye is of the formula (F3) and the at least one aminosilicone is of the formula (A), appears to be free of the prior art at this time. Accordingly, the examination has been extended to the next species, which is the species wherein the at least one fluorescent dye is of the formula (F2) and the at least one aminosilicone is of the formula (A).
- 6. Claims 7 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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# Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 3, 4, 6, 9-13, 22, 23, 66, 68, and 69 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsunaga et al (US 2001/0054206), as evidenced by *International Cosmetic Ingredient Dictionary and Handbook* ("Handbook"), Seventh Edition (1997), page 73.

The claimed invention is drawn to a cosmetic composition comprising, in a cosmetically acceptable medium, at least one fluorescent dye that is soluble in the medium and at least one aminosilicone, according to claim 1 (see claim 1).

Matsunaga et al discloses a composition comprising a fluorescent dye (see abstract). A silicone is added to the hair dye composition to dye the hair uniformly and have improved cosmetic effects (paragraph 24); the silicone Amodimethicone SM8702C is exemplified (see Examples 4 and 8, page 4). One skilled in the art would recognize that the "Amodimethicone" compound to be an aminosilicone; as evidence, *Handbook* discloses that Amodimethicone is an aminosilicone, used in hair dyes (see page 73). Therefore, the invention of Matsunaga et al anticipates the claimed invention.

Regarding claims 3 and 4, Matsunaga et al disclose that the compound (2) is known as C.I. Basic Yellow 2, and therefore is in the yellow range, which is 570-590 nm.

This range is within Applicant's ranges of 500-650 nm (claim 3) and 550-620 nm (claim 4).

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Regarding claim 6, the species to be examined is the composition wherein the at least one fluorescent dye is of the formula (F2). Matsunaga et al disclose said compound as compound (2), or C.I. Basic Yellow 2 (see abstract and paragraphs 8 and 10).

Regarding claims 9-11, Matsunaga et al disclose that the dye is preferably added in an amount of 0.01 to 20 wt.%, more preferably 0.05 to 10 wt.%, especially 0.1 to 5 wt.% (paragraph 16); this is identical to Applicant's amounts in claims 9-11.

Regarding claims 12 and 13, Matsunaga et al disclose that the silicone Amodimethicone is in the composition, which is identical to Applicant's aminosilicone of formula (A). As evidence, *Handbook* teaches the formula of Amodimethicone, which is Applicant's formula (A) (see page 73).

Regarding claims 22 and 23, Matsunaga et al disclose that the Amodimethicone is present at 1.5 to 2 wt.% (see Examples 4 and 8, page 4). This is within Applicant's ranges of 0.01 to 20% by weight (claim 22) and 0.1 to 10% by weight (claim 23).

Regarding claims 66, 68, and 69, Matsunaga et al disclose that the hair dye composition can be prepared in a two-part composition having the dye in one part and an oxidizing agent in another part (paragraph 26).

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# Response to Arguments

9. Applicant's arguments filed 10/8/08 have been fully considered but they are not persuasive.

Applicants argue that Matsunaga does not teach every element of the present claims because they do not the elected fluorescent dyes, i.e., those of formula (F3). Applicants note that claim 6 is not rejected, which is specifically directed to compositions comprising the elected dyes.

This argument is not persuasive because the rejected claims (apart from claims 6 and 68) do not present the elected dyes in a singular or Markush listing, but rather are drawn to the genus of fluorescent dyes. Additionally, Examiner notes that claims 6 and 68 are now included in the rejection, since the dyes of formula (F3) appear to be free of the prior art at this time, and the examination has been extended to the next species, i.e., the dye of formula (F2), which is disclosed by Matsunaga et al.

## Claim Rejections - 35 USC § 103

- 10. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 11. Claims 1, 5, 9-13, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luo et al (WO 99/13846).

The claimed invention is delineated above (see paragraph 8).

Luo et al teach hair care compositions comprising an optical brightener and a silicone compound (abstract). Luo et al also teach that optical brighteners can be

described by other names in the art, such as fluorescent dyes (page 3). Luo further teach that suitable silicone compounds are alkylamino substituted silicone compounds known as amodimethicones (page 19).

Luo et al do not specifically teach a fluorescent dye in combination with an aminosilicone.

However, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to select the combination of fluorescent dye and aminosilicone for the composition; thus arriving at the claimed invention. One skilled in the art would have been motivated to do so because Luo et al fairly suggest an aminosilicone as the silicone compound, such that one skilled in the art would be able to select an aminosilicone compound from the list of silicone compounds taught as a matter of routine experimentation, with a reasonable expectation of success.

Regarding claim 5, Luo et al teach that preferable optical brighteners include coumarins (page 3, lines 31-33).

Regarding claims 9-11, Luo et al. teach that the amount of optical brightener (i.e., fluorescent dye) used is from about 0.001% to about 20%, more preferably from about 0.01% to about 10% (page 3, lines 34-36). These amounts are comparable to the amounts claimed by Applicants, especially given that the prior art uses the flexible modifier "about". One skilled in the art would be able to select optimal amounts of fluorescent dye from within said ranges as a matter of routine experimentation.

Regarding claims 12 and 13, Luo et al teach that an especially preferred amino substituted silicone the compound of formula (IV) (page 20, lines 5-20); this compound is encompassed by Applicant's aminosilicone compound of formula (A).

Regarding claim 30, Luo et al teach that the composition is a shampoo (see, for example, claims 9-14) which alters the color of the hair by emitting light in the visible range (page 3, lines 22-24).

With respect to Applicant's arguments that "[A] fluorescent dye as disclosed herein can be differentiated from an optical brightener" (page 5, paragraph), it is noted that Applicant's claims are not limited to fluorescent dyes which are also not optical brighteners. Furthermore, while the optical brighteners of Luo et al. absorb light in the range of about 200 nm and about 420 nm, they **emit** light in the range of about 400 nm and about 780 nm, and also may have minor absorption peaks in the visible range between a wavelength of about 360 nm and about 830 nm (see page 3, lines 8-21 of Luo et al.). These ranges overlap the ranges of the claimed invention, and one skilled in the art would be able to optimize such ranges as a matter of routine experimentation.

# Response to Arguments

12. Applicant's arguments filed 10/8/08 have been fully considered but they are not persuasive.

Applicants first argue that Luo contains no teaching, suggestion, or motivation for lightening dark hair with direct dyes.

This argument is not persuasive because the claims are not directed to a method for lightening dark hair with direct dyes, but rather a cosmetic composition comprising fluorescent dyes.

Applicants also argue that Luo does not teach the elected dyes, i.e., those of formula (F3).

This argument is not persuasive because the rejected claims do not present the elected dyes in a singular or Markush listing, but rather are drawn to the genus of fluorescent dyes.

Applicants argue that Luo does not teach or suggest any dyes that absorb light in the visible spectrum and possibly in the ultraviolet spectrum, such as wavelengths ranging from about 360 to about 700 nm, and emit fluorescent light of a longer wavelength in the visible region of the spectrum as the fluorescent dyes of the present claims.

This argument is not persuasive because, as stated previously, the optical brighteners of Luo et al. absorb light in the range of about 200 nm and about 420 nm, and emit light in the range of about 400 nm and about 780 nm, and also may have minor absorption peaks in the visible range between a wavelength of about 360 nm and about 830 nm (see page 3, lines 8-21 of Luo et al.). These ranges overlap the ranges of the claimed invention, and one skilled in the art would be able to optimize such ranges as a matter of routine experimentation.

Applicants finally argue that nothing in Luo would teach or suggest the specific elected fluorescent dyes of the present claims, i.e., aminosilicones in combination with the specific fluorescent dyes of the presently amended claims.

This argument is not persuasive because Luo teach that suitable silicone compounds are alkylamino substituted silicone compounds known as amodimethicones (page 19), and the rejected claims do not present the elected dyes in a singular or Markush listing, but rather are drawn to the genus of fluorescent dyes. Examiner further notes that the claims have not been amended.

# 13. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsunaga et al (US 2001/0054206) in view of Peters et al (EP-370470).

Claim 2 of the claimed invention is drawn to a cosmetic composition according to claim 1, wherein the fluorescent dye is in the orange range.

The invention of Matsunaga et al is delineated above (see paragraph 9).

Matsunaga et al teach that the dye of formula (2) is also known as Basic Yellow 2 (paragraph 10).

Matsunaga et al do not specifically teach that the dye is in the orange range.

Peters et al teach fluorescent dyes for use in cosmetic compositions applied to a person's hair (abstract). The dyes may be yellow or orange, and are well known commercially available materials (col. 2, lines 30-48). Peters et al further teach that the dye(s) may be used with a carrier which is a silicone oil (col. 4, lines 35-40).

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It would have been obvious to a person having ordinary skill in the art at the time the invention was made to substitute an orange dye for the yellow dye of Matsunaga et al; thus arriving at the claimed invention. One skilled in the art would have been motivated to do so because the dye provides an aesthetically pleasing appearance to the hair, as taught by Peters et al (abstract). One would reasonably expect success from substituting the orange dye of Peters et al for the yellow dye taught by Matsunaga et al because both references are drawn to dye compositions comprising a fluorescent dye and a silicone carrier.

#### Response to Arguments

14. Applicant's arguments filed 10/8/08 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., that neither reference provides any motivation to use direct dyes for lightening dark hair) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). It is also noted that the claims in question are not directed to a method for lightening dark hair with direct dyes, but rather a cosmetic composition comprising fluorescent dyes.

Applicants also argue that, although Peters mentions application to the hair, there is absolutely no disclosure of a hair dyeing composition.

This argument is not persuasive. Peters teaches colored cosmetic compositions for application to the hair (abstract and col. 1, lines 44-50); one skilled in the art would immediately recognize "hair dyeing compositions" from said description.

Applicants finally argue that Matsunaga does not teach the dyes of claim 2, let alone those of formula (F3), and Peters does not rectify this deficiency.

This argument is not persuasive because claim 2 is only limited to fluorescent dyes in the orange range, which are taught by Peters.

15. Claims 5 and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsunaga et al as evidenced by *Handbook* as applied to claims 1, 3, 4, 6, 9-13, 22, 23, 66, 68, and 69 above, and further in view of Kalopissis et al (US Patent 3,894,837).

Claims 5 and 67 of the claimed invention are drawn to the cosmetic composition or multi-compartment kit according to claims 1 and 66, respectively, wherein the at least one fluorescent dye is chosen from the list in claim 5 (see claim 5).

The invention of Matsunaga et al is delineated above (see paragraph 8).

Matsunaga et al further teaches that another direct dye can be used in combination with the disclosed composition (paragraph 14).

Matsunaga et al do not teach that the other dye is one of the dyes listed in claim 5.

Kalopissis et al teach that dyes, such as oxazines, are conventional hair dyes to be used in hair dye compositions (see col. 3, lines 56-61).

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It would have been obvious to a person having ordinary skill in the art to include an oxazine direct dye in the hair dye composition of Matsunaga et al; thus arriving at the claimed invention. One skilled in the art would be motivated to do so because oxazine dyes are known conventional hair dyes as taught by Kalopissis et al, and Matsunaga et al fairly teach and suggest including said dye in the disclosed hair dye compositions.

One would reasonably expect success from the addition of the oxazine dye taught by Kalopissis et al in the composition taught by Matsunaga et al because both references are drawn to hair dye compositions.

With respect to the descriptive term 'fluorescent', one skilled in the art would reasonably expect the dye taught by Kalopissis et al to be fluorescent, since the dye of Kalopissis et al is the same as the dye of the claimed invention.

## **Double Patenting**

16. The provisional rejection of claims 1-13, 22, 23, 30 and 66-69 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-32 and 39 of U.S. Patent No. 7,147,673 in view of *International Cosmetic Ingredient Dictionary and Handbook ("Handbook")*, Seventh Edition (1997), page 73, or alternatively over claims 1-38 and 45 of U.S. Patent No. 7,186,278; claims 1-17 and 31 of U.S. Patent No. 7,192,454; claims 44-81 and 86 of U.S. Patent No. 7,198,650; claims 1-31 and 37 of U.S. Patent No. 7,204,860; or claims 1-41 and 48 of U.S. Patent No. 7,208,018, each in view of *International Cosmetic Ingredient Dictionary and Handbook* 

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("Handbook"), Seventh Edition (1997), page 73, is withdrawn in view of Applicant's Terminal Disclaimer filed 10/8/08.

#### Conclusion

No claims are allowed at this time.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BARBARA FRAZIER whose telephone number is (571)270-3496. The examiner can normally be reached on Monday-Thursday 9am-4pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sharmila Landau can be reached on (571)272-0614. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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**BSF** 

/Sharmila Gollamudi Landau/ Supervisory Patent Examiner, Art Unit 1611